

assessed by DXA. Physical fitness tests included a countermovement jump (CMJ), and Yo-Yo intermittent endurance test (YYIE). PA was monitored with accelerometers during 5 days. Maturity offset was used as an indicator of biological maturity status. Statistical procedures included repeated measures ANCOVA controlling for age and maturity status. Over the 6-months significant reductions ($p < 0.05$) in weight, %body fat, lean body mass, whole-body bone mineral density and content, HDL-cholesterol and FG were observed. In contrast, a significant increase ($p < 0.05$) was observed in CMJ and YYIE. These findings provide preliminary evidence that a 6-month recreational soccer program yields several body composition, cardiometabolic markers and physical fitness benefits in overweight children and should represent an effective intervention for health promotion.

T5:S25.72

Effect of health education program for type 2 diabetes mellitus with HbA1c, BMI (body mass index) and waist-to-hip circumference ratio in Indonesia

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Type 2 DM in Indonesia is one of the main causes of non-communicable diseases, or about 2,1% of all deaths. Lack of participation in disease therapy can be the reason of poor outcome in patients, so they need self-management education and support to prevent acute complications and to reduce the risk of long-term complications. The aim of the present study was to determine HbA1c and BMI (body mass index) and waist-to-hip circumference ratio as the impact of the health education program. The design was an experimental study. Design used was the one-group pretest-posttest design. In the design of the test was done by comparing the results of one group were given health education before (pretest) and after the time given health education and 3 month after education (posttest), and using nonprobability sampling with purposive sampling method. The health education program was given to the subject for 4 weeks. The research was initiated in May 2013, which involved 31 patients. Results showed significant differences in the HbA1c ($z = 2.357, p = 0.018$), BMI ($t = 5.247, p = 0.000$), and waist-to-hip circumference ratio ($t = 4.146, p = 0.000$). The regression results of BMI with HbA1C ($t = 0.206, p = 0.053$) and waist-to-hip circumference ratio with HbA1C ($t = 1.692, p = 0.0305$) showed no significant. Effective contribution waist-to-hip circumference ratio and BMI on HbA1c is very small at only 1% for BMI predictor and 10% for waist-to-hip circumference ratio predictor. HbA1c and BMI (body mass index) and waist-to-hip circumference ratio can be improved by providing health education in patients with type 2 diabetes, although further research on the length of follow-up is still needed.

T5:S25.73

Treatment response of a psychological group treatment for adolescents with obesity

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Objective: Obese adolescents are negatively affected by psychosocial consequences of their obesity. They tend to develop emotional and social problems and a lack of self-acceptance. The objective of this study was to examine if a psychological group intervention increases weight loss and alleviate psychosocial problems.

Methods: Adolescents in our Children's Obesity Clinic were invited to participate in group treatment. This comprises a total of ten bi-weekly 1 1/2-hour sessions with 5–7 obese adolescents guided by a psychologist and a nurse. Therapeutic topics were planned according to the particular group. After one year, changes in body mass index (BMI) and standard deviation scores (SDS) were compared with a control group of comparable adolescents from the clinic. In addition the intervention group completed an evaluation questionnaire at the end of the study.

Results: The intervention group composed of 27 adolescents (15–19 years, mean BMI SDS 3.09), the control group of 33 adolescents (15–19 years, mean BMI SDS 2.79). The attendance was averaging 78%. At follow-up there was a slight, non-significant decrease in mean BMI SDS ($-0.08, p = 0.39, n = 23$) in the intervention group and a small, non-significant increase in the control group ($0.067, p = 0.17, n = 33$). After group treatment 95.8% spoke more about overweight with peers; 75% found it easier to talk with others and 90% reported increased self-acceptance.

Conclusion: Group treatment might be an effective parallel intervention to individual treatment of obesity and psychosocial problems. Our findings indicate that future studies of group treatment in obese adolescents are warranted.

T5:S25.74

Obesity and BMI as a prognostic indicator of severity in Acute Pancreatitis

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Background: There are several studies that suggest that obesity is a risk factor for Acute Pancreatitis (AP) and also a prognostic indicator of severity in AP.

Aim: The aim of our study was to evaluate Obesity a BMI as a prognostic indicator of severity in AP.

Material and Methods: 101 patients with AP during a year were prospectively followed and enrolled in the study. Severity of AP was determined as Mild/Moderate AP and Severe AP according to Atlanta criteria. Obesity and BMI (body mass index) was evaluated upon admission. Obesity was considered when BMI was more than 29.9 kg/m².

Results: There were 33 female (32.7%) and 68 male (67.3%) patients. 72 patient (71.3%) had mild/moderate AP, while 29 patients (28.7%) had severe AP. 94.8% of patients were non obese with BMI < 29.9 Kg/m² (72.8% of pts had mild/moderate AP and 21.9% had SAP), while 5.2% of patients had BMI > 29.9 (2.1% of pts had mild/moderate AP, and 3.1% had severe AP). Overweight or obesity (BMI > 29.9) was not associated with severe pancreatitis ($P = 0.958$). The overall mortality was 3%, while mortality among severe AP was 10.3%.